# memorandum

Carlsbad Field Office Carlsbad, New Mexico 88221

DATE:

May 6, 2003

REPLY TO

ATTN OF:

CBFO:QA:MPN:GS:03-1184:UFC 2300.00

SUBJECT:

Surveillance Report S-03-14, Hanford TRU Waste Characterization and Certification Programs and Processes Related to the Headspace Gas Sampling and Gastight (Airtight) Seal at WRAP

To: Todd A. Shrader, DOE-RL

The Carlsbad Field Office (CBFO) conducted the subject surveillance at the Hanford Site in Richland Washington, April 29, 2003. The surveillance team concluded that the Headspace Gas Sampling and Gastight (Airtight) Seal operations at the WRAP facility were adequate, satisfactorily implemented, and effective.

The personnel contacted during this surveillance are to be commended for their professionalism, candor, and assistance. The individuals contacted were courteous, cooperative, and supportive of the surveillance activity, as well as, accommodating the team to observe HSG sampling and gastight seal activities and associated records. Please see the attached report for additional details.

If you have any questions or comments concerning this report, please contact me at (505) 234-7483.

Martin P. Navarrete

Quality Assurance Specialist

#### Attachment

cc: w/attachment

I, Triay, CBFO \*ED

A. Holland, CBFO \*ED

K. Watson, CBFO \*ED

R. Dunn, FH \*ED D. De Rosa, FH \*ED

M. Eagle, EPA \*ED

E. Feltcorn, EPA \*ED

J. Bearzi, NMED \*ED

B. Walker, EEG \*ED

D. Winter, DNFSB \*ED

P. Rodriguez, CTAC \*ED T. Bowden, CTAC \*ED

T. Bowden, CTAC K. Dunbar, WTS

CBFO QA File

CBFO M&RC



# **U.S. DEPARTMENT OF ENERGY** CARLSBAD FIELD OFFICE

# **SURVEILLANCE REPORT**

# OF THE **HANFORD SITE**

RICHLAND, WASHINGTON

# **SURVEILLANCE NUMBER S-03-14**

**APRIL 29, 2003** 

# TRU WASTE CHARACTERIZATION ACTIVITIES AT THE WASTE REPROCESSING AND PACKAGING FACILITY



Prepared by:

Pete Rodriguez, CTAC

Surveillance Team Leader

Approved by: 9

Avá L. Holland, CBFO

Quality Assurance Manager

Date: 5-2-03

Date: 5/6/03

#### 1.0 EXECUTIVE SUMMARY

Carlsbad Field Office (CBFO) Surveillance S-03-14 was conducted to evaluate the adequacy, implementation, and effectiveness of the applicable technical activities related to the Hanford site transuranic (TRU) waste characterization activities for headspace gas (HSG) sampling and gastight (a.k.a. airtight) seal of pipe overpack containers (POCs) at the Waste Receiving and Processing (WRAP) facility, as applied to Summary Category Groups S3000, homogeneous solids, and S5000, debris waste.

The surveillance was conducted at the Hanford site on April 29, 2003. The surveillance team concluded that the Hanford technical procedures are adequate relative to the flow-down of requirements from the CBFO Quality Assurance Program Document (QAPD), and the Waste Acceptance Criteria (WAC).

The surveillance team concluded that the Hanford quality assurance (QA) program, relative to HSG sampling and gastight seal of POCs at the WRAP, satisfactorily met the requirements of the QAPD and WAC. The surveillance team also concluded that the QA program is being satisfactorily implemented. The adequacy, implementation, and effectiveness of the Hanford QA program was verified and documented during recertification Audit A-02-23, on June 24-28, 2002. The surveillance team determined that the aforementioned Hanford technical processes evaluated for WRAP are satisfactorily implemented and effective.

The surveillance team did not identify any conditions adverse to quality (CAQs) that required the issuance of CBFO corrective action reports (CARs). No issues were identified that resulted in Observations during the surveillance.

#### 2.0 SCOPE

The surveillance team evaluated the adequacy, implementation, and effectiveness of technical processes related to the Hanford site TRU waste characterization and certification programs, procedures, and processes for HSG sampling and gastight (airtight) seal in POCs at the WRAP facility, as applied to Summary Category Groups S3000, homogeneous solids, and S5000, debris waste.

The following CBFO technical characterization elements were evaluated in accordance with the WAC:

HSG sampling HSG analysis Gastight (airtight) seal

Evaluation of Hanford TRU waste characterization program documents was based on current revisions of the following documents:

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Hanford Site Quality Assurance Project Plan (QAPjP) for the Transuranic Waste Characterization Program

Hanford Site Transuranie Weste Cortification Plan

Related Hanford/WRAP technical implementing procedures

#### 3.0 SURVEILLANCE TEAM, INSPECTORS, AND OBSERVERS

#### SURVEILLANCEORS/TECHNICAL SPECIALISTS

William (BJ) Verret

Surveillance Team Leaver, CTAC

Technical Specialist, CTAC

JESERVERS/INSPECTORS

None were present during the surveillance.

## 4.0 SURVEILLANCE PARTICIPANTS

Hanford individuals involved in the surveillance process are identified in Attachment 1. A pre-surveillance meeting was held in the WRAP conference room on April 29, 2003. The surveillance was performed and concluded with post-surveillance meetings held at the WRAP conference room and at Building 200-W on April 29, 2003.

#### 5.0 SUMMARY OF SURVEILLANCE RESULTS

## 5.1 Program Adequacy, Implementation, and Effectiveness

The surveillance team concluded that the Hanford WRAP technical program satisfactorily met the requirements of the CBFO QAPD, revision 4, and the WAC, revision 0.1. The Hanford WRAP technical processes evaluated by the surveillance team were determined to be satisfactorily implemented and effective.

#### 5.2 Technical Activities

Evaluations of applicable Hanford technical activities are summarized below. Technical procedures evaluated during the surveillance are provided in Attachment 2.

## 5.2.1 Headspace Gas Sampling

The surveillance team evaluated the HSG sampling process and procedures located in the WRAP facility at the Hanford site. This process and procedure (DO-080-009, Appendix A) is limited to the collection of HSG samples through the drum filter or POC using a single or duplicate canister assembly to collect samples of HSG from waste drums. The surveillance team evaluated the applicable WRAP procedures to ensure they were consistent with the upper-level CBFO requirements. Using the reviewed

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Hanford procedures, a checklist was prepared and used to evaluate the HSG sampling and gastight (airtight) seal process as follows:

- Operability and condition of equipment (i.e., sampling canister assemblies, sampling head assembly and gastight (airtight) seals)
- Implementation and effectiveness of instrument/measurement controls (for thermometers and torque wrenches)
- Verification that Hanford procedures are executed
- Completed data packages for HSG sampling and analysis, to ensure data are reported and reviewed as required
- Data storage and retrievability

The surveillance team interviewed Hanford and contractor personnel, observed operations, and examined records. The surveillance team concluded that the written procedures for HSG sampling and gastight (airtight) seal were adequate. The surveillance team also determined that this process has been satisfactorily implemented and is effective.

#### 5.2.2 Gastight Seal/Airtight Seal

The surveillance team evaluated and observed gastight (airtight) seal activities for POCs at the WRAP facility and verified that operations were conducted and documented in accordance with procedural requirements. The operations applied to retrievably stored debris and homogeneous solid waste in POCs at the WRAP. The specific waste streams and Summary Category Groups subject to the HSG sampling and gastight (airtight) seal processes were Rocky Flats ash and Hanford ash (S3000, homogeneous solids) and sand, slag, and crucibles (S5000, debris). The HSG sampling and gastight (airtight) seal requirements for TRU waste at the WRAP facility is promulgated to the waste generators by the TRU Site Project Office in Appendix A of Procedure DO-080-009. At the time of the surveillance, implementation of this procedure had been limited to Rocky Flats ash, Hanford ash, and sand, slag, and crucibles, newly generated and retrievably stored solids and debris waste (S3000 and S5000).

During the surveillance, HSG sampling and gastight (airtight) seal processes and operations were witnessed in the WRAP facility. This included the sampling and gastight (airtight) seal of waste POCs. One batch data report (BDR) was reviewed that documented the sampling and gastight seal process for waste processed at the WRAP for S3000 and S5000 wastes. This BDR, Batch Data Report for Sampling and Analytical Batch Number 030415 for Waste Streams SS&C01 and MHASH01, was found to be technically acceptable. Note: SS&C01 denotes "Sand, Slag and Crucibles," while MHASH01 denotes "Mixed Hanford Ash."

The training of the HSG sampling and gastight (airtight) seal personnel was reviewed and found to meet the requirements of the TRU Waste Program. No deficiencies were identified and the surveillance team determined that the written procedures for the HSG

sampling and gastight (airtight) seal at the WRAP were adequate. The team also concluded that the HSG sampling and gastight (airtight) seal processes were satisfactorily implemented and effective.

# 5.2.3 Data Generation and Data Verification and Validation (V&V)

One batch data report (for HSG sampling and analytical batch number 030415 from WRAP) was examined and evaluated to verify implementation of procedural requirements. The surveillance team determined that procedures for data generation and project level data V&V remain adequate. The team also determined that the process for data generation and project level V&V continues to be satisfactorily implemented and effective.

- 6.0 Corrective Action Reports (CARs), Corrected During the Surveillance (CDS), and Observations
- 6.1 CARs Initiated as a Result of CBFO Surveillance S-03-14

No conditions adverse to quality were identified during the surveillance and no CARs were initiated.

## 6.2 Deficiencies Corrected During the Surveillance (CDS)

No deficiencies were identified during the surveillance.

#### 6.1 Observations

No Observations were identified during the surveillance

## 7.0 LIST OF ATTACHMENTS

Attachment 1: Personnel Contacted During the Surveillance

Attachment 2: Table of Procedures Surveilled

# PERSONNEL CONTACTED DURING THE SURVEILLANCE

HANFORD PERSONNEL CONTACTED				
NAME	ORG/TITLE	PRE SURVEILLANCE MEETING	CONTACTED DURING SURVEILLANCE	POST SURVEILLANCE MEETING
Colley, Briana	FH WSCF Org. Chem., HSG	X	Х	
DeRosa, David	FH TRU Site Project Manager	Х		Χ.
Downing, Monty	WRAP OPS., NCO HSG	X	х	·
Frenzel, P.	Radcon, RCT HSG	X	X	
Hackworth, M. F.	WRAP, MBA Custodian HSG	Х	X	
Hammitt, F.	WRAP RCT, Radcon. HSG	Х	Х	
Harris, Phillip	WRAP OPS., NCO HSG	Х	X	
Horhota, Michael	Alternate Site Quality Assurance Officer	Х		
Lampman, Louis	WRAP, NCO HSG	X	X	
Kover, Karola	FH Waste Certification Official Alternate, and TRU HSG Lead WCO	X	X	х
Nance, Sheri	WSCF FQAO, Alt. SQAO	X	Х	Х
Pingle, L.	WSCF, Scientist HSG	Х	Х	
Ruhlman, W.A. "Bill"	DOE-RL Facility Rep. WRAP CWC/LCBC	X	X	
Taylor, C. E.	WRAP OPS. DOS	Х	Χ .	X

# HANFORD PFP PROCEDURES SURVEILLED

NUMBER	PROCEDURE NUMBER	TITLE
1.	DO-080-009	Obtain Headspace Gas Samples of TRU Waste Containers
2	(Appendix A)	(HSG sampling and airtight seal, at the WRAP facility)
2.	WMP 400, Section 8.1.8	Data Management for Headspace Gas Sampling and Analytical
		Results

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